

PRESENTATION

GUYAFOR is dedicated to long-term studies in forest dynamics and biodiversity to provide a scientific basis for the sustainable management of forest resources. Forest plots have been established in French Guiana since the late 60's. They have been recently integrated into the GUYAFOR network with standardized protocols for both tree inventories and environmental characterization.

AIMS

- To understand forest structure and floristic composition across gradients of soil type and precipitation
- To understand long-term forest dynamics in mature and logged forests:
 - the role of demographic processes (growth, mortality, regeneration)
 - biomass dynamics and carbon cycling
 - the consequences of climate change

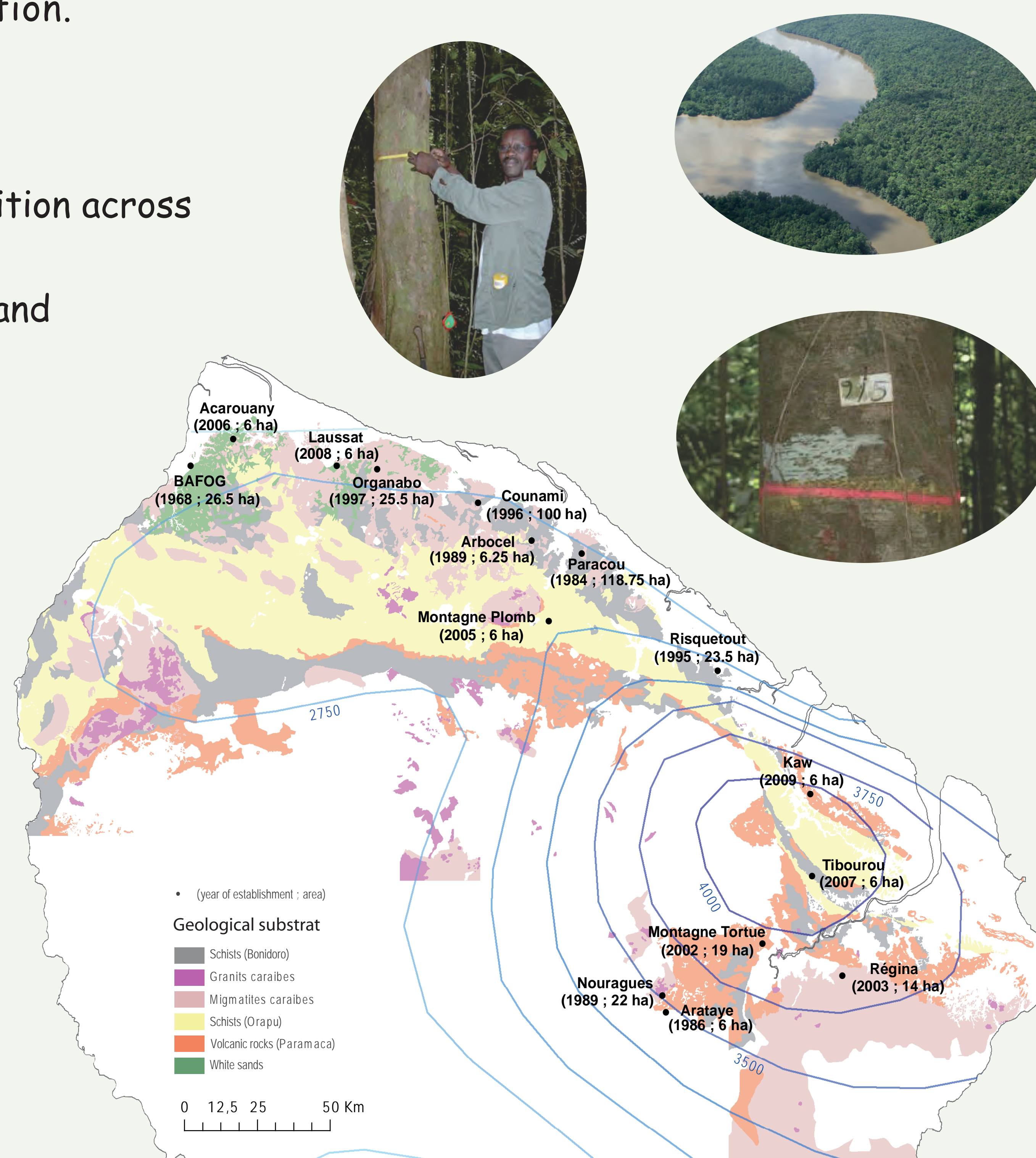
FOREST PERMANENT PLOTS

Tree inventories

- tree mapping
- tree identification, with common names currently being updated to botanical determination
- DBH measurement (every 2 or 4 years)

Environmental data

- soil description (WRB classification, fertility)
- monthly rainfall



15 sites ; 49 plots ; 370 ha
157,825 trees and 1,208,596 DBH measurements

Data base management tools

FIREBIRD (Data base, Versioning)	Research for data errors and data correction
ACCESS (Data base, Storage)	Interface of consultation
R (Statistical software)	GUYAFOR package of statistical analysis

PARTNERS

Network management and site selection

S. Guitet (ONF) L. Blanc (CIRAD) J. Chave (CNRS) C. Baraloto (INRA)

Botanical surveys

P. Petronelli (CIRAD) J. Engel (CNRS - CIRAD)

Soil studies

B. Ferry (AgroParisTech) V. Freycon (CIRAD)

Data base management

A. Jolivot (CIRAD) E. Marcon (AgroParisTech)

Collaborations

D. Sabatier JF. Molino (IRD, Cayenne Herbarium)
O. Phillips Y. Malhi (Rainfor project)

On going projects

Guyafor (<http://www.ecofog.gf/fr/programmes/Guyafor.htm>), FEDER Funds (Europe)
Bridge (<http://www.ecofog.gf/Bridge/>), ANR Funds (France)

And the "Magic Field Team"

